

Practical Understanding of Commissions, Volatility and Shift

Let's talk about some minor but important concepts.

Effect of Commissions and Spreads in Different Strategies

Think about the effects that a 1 pip commission and 1 pip spread will have on our profits if our strategy is a

Case 1: Long term trend following strategy (1 trade a month. Average 200 pips profit a month without commissions)

Case 2: Short term 3-currency correlation strategy (300 trades a month. Average 500 pips profit a month without commissions)

Case 1: Long term trend following strategy

Profit before commissions is 200 pips. Profit after commissions and spreads is 198 pips ($200 - (1 + 1) = 198$).

Case 2: Short term 3-currency correlation strategy

Profit before commissions is 500 pips. Profit after commissions and spreads is -100 pips ($500 - (1 + 1) * 300 = -100$).

We lose 100 pips a month here.

Conclusion

Effect of commissions and spreads is higher in strategies with low average profits. Remember, the metric you're looking for is average profit per trade, not number of lots bought per trade or amount of leverage used per trade.

Keep this in mind when designing your strategies.

Understanding Volatility

Some students have been asking me what value of the ATR constitutes high volatility and what constitutes low volatility.

There is no objective measure. It is a relative measure and it depends on your strategy.

You need to understand the underlying reason for your strategies.

Example:

1) The strategy requires the market to be generally volatile

Use an ATR with higher period in a larger timeframe and compare current shift with a higher shift. For instance, ATR(50) on a daily timeframe. Compare ATR(50) shift 1 to shift 100.

2) The strategy requires a sharp change in volatility

Use an ATR with lower period in a lower timeframe and compare current shift with a lower shift. For instance, ATR(24) on an hourly timeframe. Compare ATR(24) shift 1 to shift 48.

Optimise your Parameters

The examples above should give you decent starting points. You should use optimisation methods to finetune your ATR parameters after that. Do note that optimising your ATR parameters usually shouldn't make a big difference if your initial ATR parameters were set with market prudence and sound logic.

When to use Shift 0 vs Shift 1

Alright, we should use shift 0 (on closing price) when you are trying to get your EA to react quickly to price changes. This is so as using shift 0 will capture the latest price.

When using shift 0 on backtests, do remember to run the tests on "Every tick" mode. Don't forget that 1 min intrabar candlestick movements are made up (see:

<https://algotrading101.com/courses/13378/lectures/1390722> -> Right click and open in new tab)

Note: If you have forgotten the significance of using shift 0. Do head back to the lecture *Executing Trades Immediately - "Every tick" Backtesting*

(<https://algotrading101.com/courses/13378/lectures/609169> -> Right click and open in new tab) and check out the sections titled "What does iClose(NULL, 0, 0) mean?" and "What does the Indicator Value at Shift 0 mean?".